

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1-26(cancelled):

27. (new) A method for transferring a material onto a substrate comprising the steps of:

- (a) directing light of a wavelength in the infrared region which is resonant with a vibrational mode at a target starting material,**
- (b) vaporizing the target material without decomposing it, and**
- (c) depositing the vaporized material on a substrate in solid form that is essentially same chemically as the starting target material.**

28. (new) The method of claim 27 wherein the vibrational mode is in the infrared region of 1-15 microns.

29. (new) The method of claim 27 wherein the vibrational mode is in the infrared region of 2-10 microns.

30. (new) The method of claim 27 wherein the material is selected from the group consisting of organic, inorganic, biological materials and mixtures thereof.

31. (new) The method of claim 27 wherein the material is polymeric.

32. (new) The method of claim 27 including the steps of subjecting the target and the substrate to an environment selected from the group consisting of sub-atmospheric, atmospheric and above atmospheric pressure and locating the target and the substrate in the vicinity of each other so that the vaporized material from the target can be deposited on the substrate by free fall; and the

temperature of the substrate is such that the vaporized material settles on the substrate and becomes solid.

33. (new) The method of claim 32 wherein the environment is sub-atmospheric pressure and the sub-atmospheric pressure is on the order of 4×10^{-8} Torr.

34. (new) The method of claim 27 wherein thickness of the coating on the substrate is in the range of about 10 angstroms to 1 micron.

35. (new) The method of claim 34 wherein the light is issued by a tunable pulsed laser and deposition rate of the material on the substrate is in the range of about 1 to 300 mg/cm²/ macropulse.

36. (new) The method of claim 27 wherein the light is provided by a laser source delivering a stream of pulses of 100 fs to 5 ms duration at pulse reactivation frequencies ranging from 1 Hz to 3 MHz.

37. (new) The method of claim 36 wherein the laser is operating in a continuous wave mode.